Manual

Power Stacker

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General

Copyright

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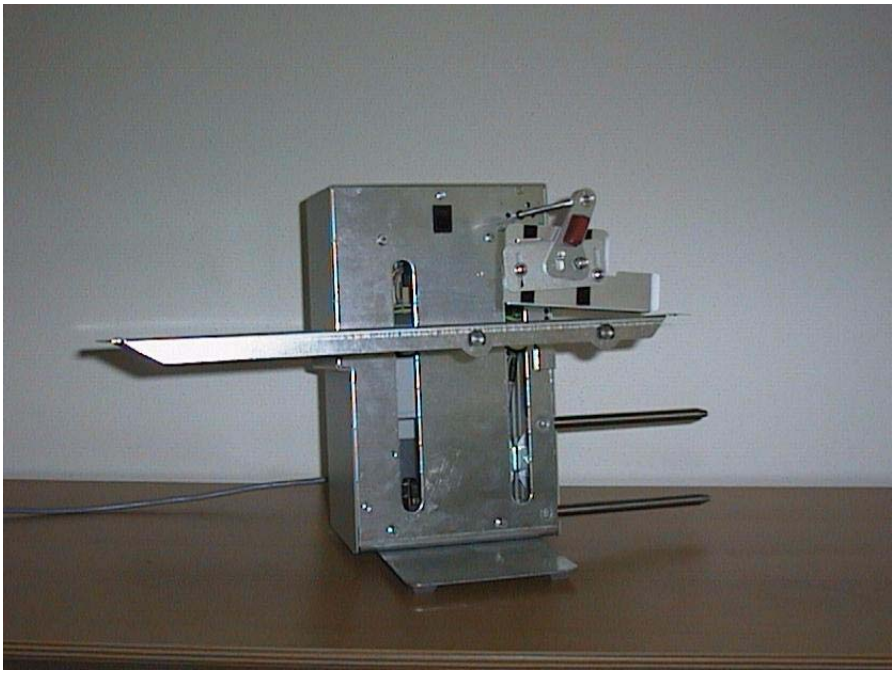
Note: Please follow the notes shown in this text - it will help to cover all situations and keep your engine working.

If in the manual is used the name TDI - it is as well meant the Xxtreme !

What is a "power stacker" ?

The power stacker is used as an option for the TDI. It is replacing the magazine witch is OK for lower quantities – using higher quantities or smaller label, special short label request the power stacker.



Similar to the TDI – the power stacker is equipped with a stepper motor driven platform to store the label on. As more label are printed as lower is the position of the platform.

Initiation

Unpacking

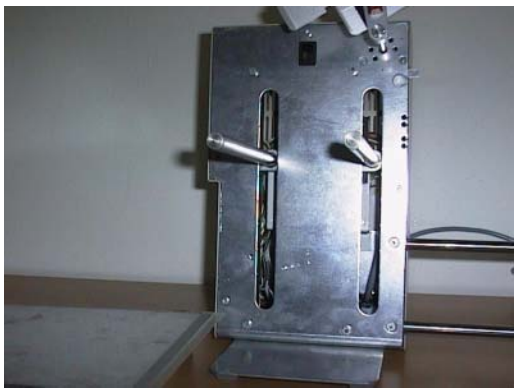
- remove packing parts - take care of documentation and parts
- remove option from packaging
- the option consists out of
  - the power stacker
  - the platform (disassembled)
  - a cover to protect the sensor from light
  - a magnetic label stopper

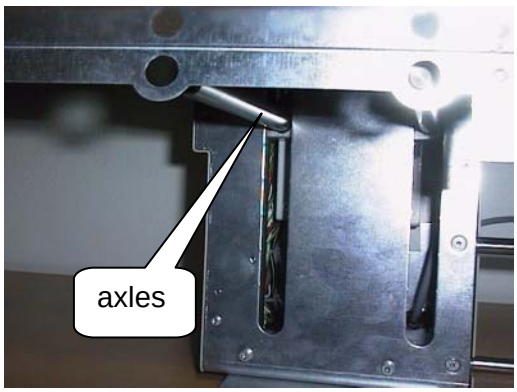
Assembling the Power Stacker

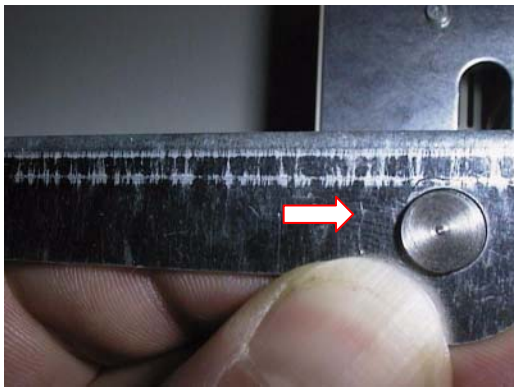
The power stacker is disassembled in the box when you receive it . Before you can use it you have to assemble the platform !

Move the platform – the plastic part in front has to show to the printer side – on the two axles coming out of the cover of the power stacker. Move it against the front plate. The axles will show around 1 mm out of the platform.

Then clip the lock washer to the two axles (as shown on the pictures). The power stacker is now ready for use with the TDI.





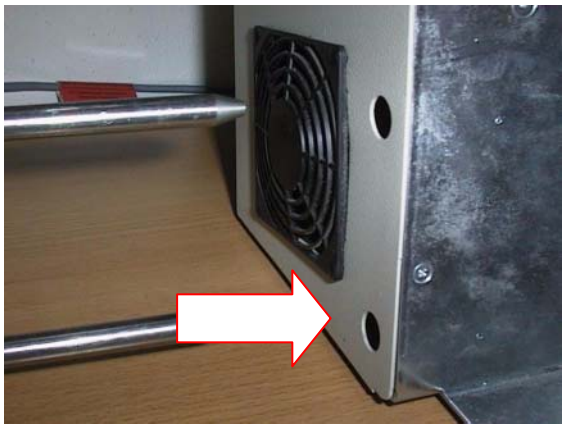


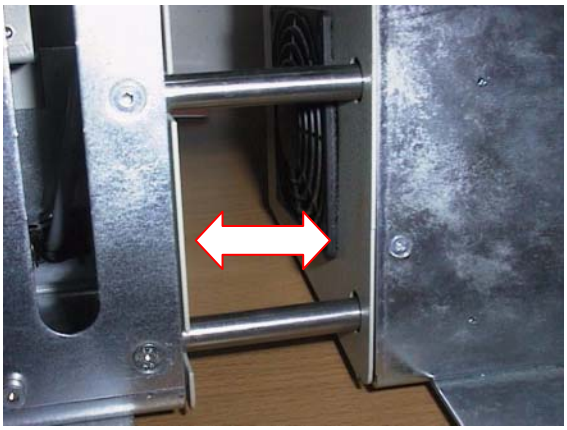
Attention: Please check if the security cover is mounted to the guiding axle (see picture) of the media guiding.

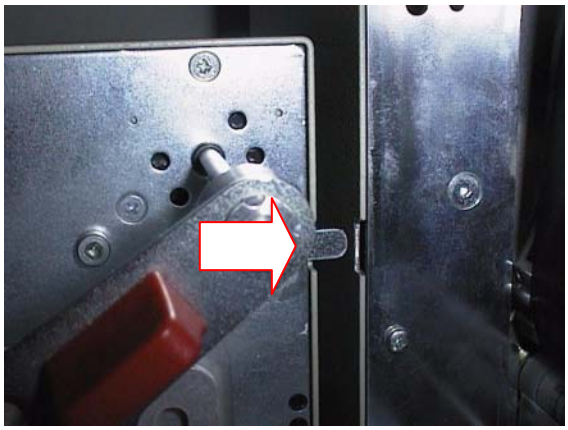
Mounting the option to the TDI

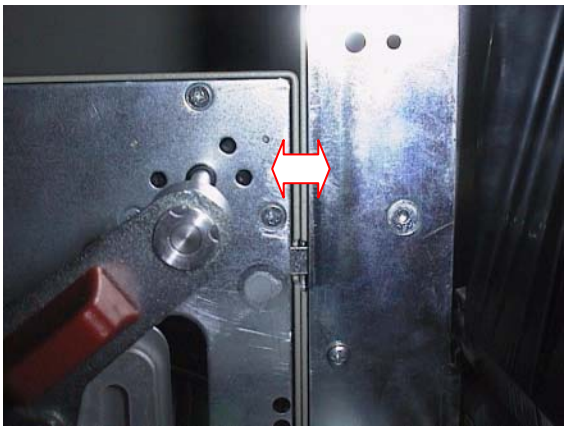
Attention: The power stacker can be mounted to the TDI mechanically from SN 01859xxxx.xxx on – but the TDI has to be equipped with the necessary wiring. You can easily see if your TDI is equipped with the wires (there has to be a diode connector on the rear side of the TDI).

Move the guiding axle into the guiding holes of the TDI (see picture) – as well move the front plate part of the power stacker into the slot of the TDI ! Both units have to stay together without any distance (see picture).









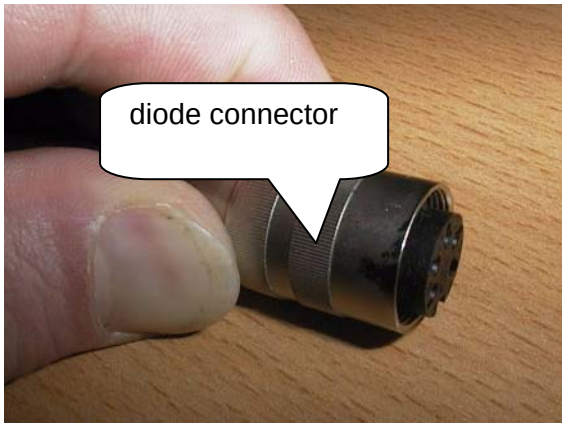
After you have mounted the power stacker to the TDI – the electrical connection has to be done.

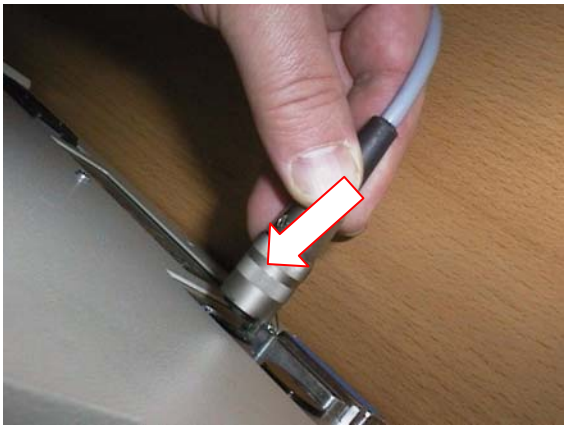
Attention: Never connect the power stacker to the TDI – if the TDI is powered on ! Always switch OFF POWER before you connect the power stacker – as well wait after power off around 2 minutes before connecting.

If you do not – both units can be damaged !

Move the diode connector into the plug on the rear side of the TDI !

Attention: If your TDI is not equipped with a connector like that – the unit can be retrofitted easily. Please call your service technician, this work can not be done by yourself.





Assemble light cover

To protect the sensor (infra red) in the power stacker against normal light – a light cover is delivered together with the power stacker.

If you recognise that light is influencing your power stacker, maybe the platform is moving up and down without reason, you should mount the light cover ! We recommend to mount the cover in every case.

Remove the film from the glue parts – remove the film from the complete cover and stick it to the cover of the TDI (as shown on the picture)

Set up mode

The power stacker is working separately – only the power is used from the TDI.

Modes of operation - operation

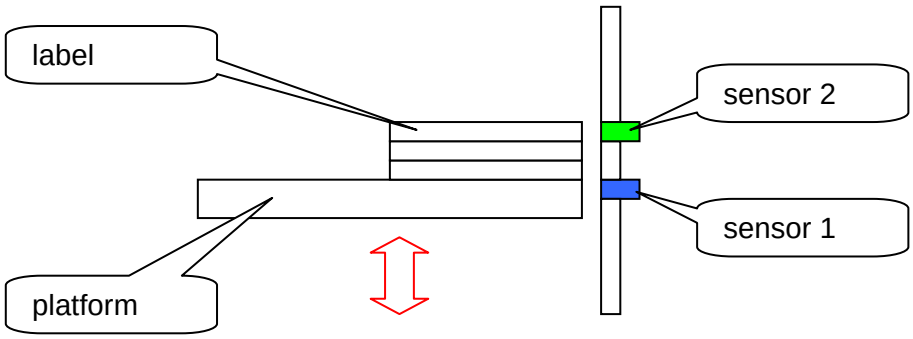
Activating the sensor

Depending to the used label size (special the label length is important) the power stacker is working in two different modes !

To understand that you should understand the principal – how the power stacker is working.

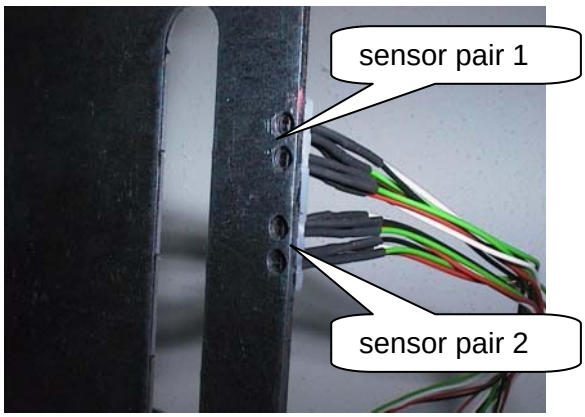
The unit is using reflex infra red sensor to check the height of the label stack – or if there is a label !

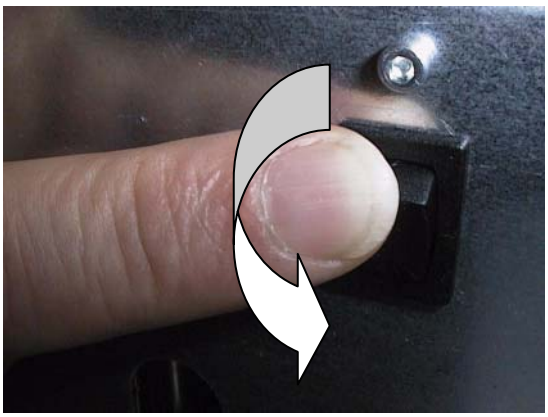
Switching on the power stacker (via the TDI) with an empty platform and the platform is down, the power stacker is moving up the platform until the first sensor is covered by the platform -–the power stacker is ready for work. If now the second sensor is covered by printed labels -the platform is moving down automatically.... the sensor is becoming free again ... the next label is covering it ... and so on.



Depending to the label length a different stack mode is necessary. Short label need less height to fall down properly then longer label. To compensate this different mode a second pair of sensor is attached to the unit. The sensor pair can be selected with the attached switch.

As a rule – label with less then 100 mm should use the upper sensor pair – longer label should use the lower pair.





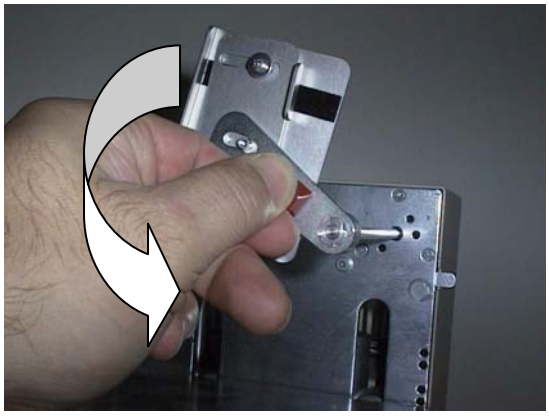
Attention: Switch in upper position means pair 1 – lower position pair 2 !

Adjusting the label width

To be sure that the stacker is working properly – the width of the expected label has to be adjusted on the power stacker.

Attention: Never use the exact label width – adjust always 1 –2 mm more to the guiding.
The label should never be squeezed – but secure guided.

The media width is adjusted with a guiding witch is movable in both directions (see picture) it can be moved on a axle to the different width of the label.

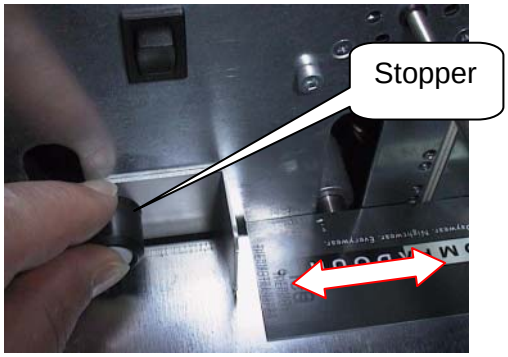


The moving parts of the guiding are used to adjust the guiding to the different sensor 8short label – long label).

Adjusting the label length

As the label width – the label length has to be adjusted. The reason for is the speed of the label after leaving the printer. The label is not falling down – it is moving with the same speed the printer has used. So we have to stop the label in the right position to form a stack looking properly.

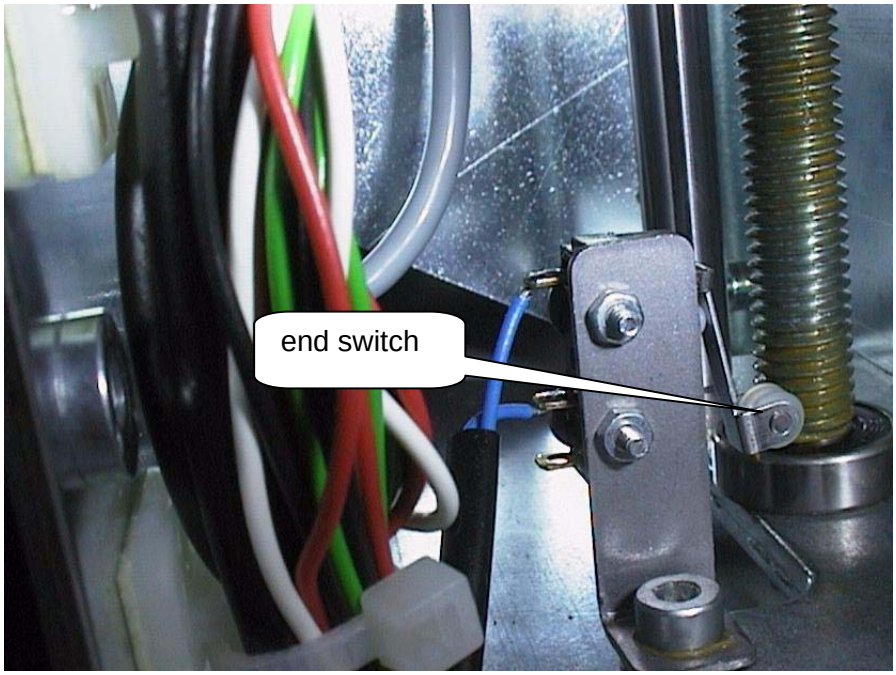
Therefore the label stopper is used. Two different units are used with the poser stacker – one for short label (not longer then the cover) one for longer label – sticks to the platform itself. Both are delivered with the power stacker. Please take care that you do not squeeze the label.



Magazine full

After the stack of label has reached the maximum – the platform is down in the lowest position. This position is sensed via a micro switch (see picture) – the power stacker stops and as well the printer is stopped witch a message on the display.

Removing a part of the stack (or the complete stack) the power stacker is moving up automatically into the upper end position – the print job can be started again.



Attention: Start by accepting the message in the display again the print job.

Information printout / parameter

Parameter Menu TDI

OFFLINE

- INFO
  - STA0
  - STA1
  - STA2
  - STA3
  - DOT1
  - DOT2
- PRTP
  - PSPD
  - MTYP
  - MLEN
  - MWID
  - PUNO
  - BCHI
  - UPCA
  - XPOS
  - YPOS
  - SSPD
  - GAP
- IFAC
  - PORT
  - SPOL
  - BMOD
  - BAUD
  - PARI
  - DBIT
  - SBIT
  - HAND
  - PRID
- SYSP
  - EMUL
  - NACH
  - SENS
  - PUNS
  - FMOD
  - OMOD
  - SMOD
  - MMOD
  - LPOS
  - SECF
  - EXTR
  - CODE
  - HRES
  - CLCK
  - USMD
  - LREP
  - CSET
  - MEND
  - SCAN
  - SERR
- JCLR
- SCLR
- OTHR
  - DOWN
  - LCLR
  - CCLR
  - ICLR
  - ADJS
  - MCHK
  - SCHK
  - PCHK
  - FACT
  - SERV
  - NULL
  - HADJ
  - ACSC

Standard / standard

nur mit Image Card Software / with image card software only

nur mit Scanner / with scanner only

Nur mit Color Option / with color option only

Nur für Service / for service only

Status printout

Are available – please use the media necessary for the printout !

Status reports

Following status messages are the most important for the power stacker – all other are shown below.

ST04 Power stacker full

Action: Remove label partly or complete

Overview - Status reports

ST 00		ST 15	head sensor not found (system will be locked)
ST 01	NOVRAM error (factory set)	ST 16	applicator home position not found
ST 02	NOVRAM write error	ST 17	dispenser pressure roller not closed
ST 03	no material in SNGL sensor	ST 18	dispenser backing paper rewinder full
ST 04	stacker full	ST 19	applicator – touch down not found
ST 05	material end	ST 20	EASY PLUG wrong command (imedeate)
ST 06	printhead overheated	ST 21	EASY PLUG wrong command between #ER and #Q
ST 07	ribbon end	ST 22	EASY PLUG command without #ER
ST 08	gap not found	ST 23	EASY PLUG not known command
ST 09		ST 24	receive error RS 232
ST 10	ramcard error	ST 25	spooler overflow
ST 11	ramcard error	ST 26	EASY PLUG wrong size or print adjustment
ST 12		ST 27	EASY PLUG counter overflow
ST 13	barcode reading error or media broken for rewinder	ST 28	EASY PLUG field outside print area
ST 14	cut sensor not found, dispenser second feeder, nothing	ST 29	EASY PLUG logo number doesn't exist

ST 30	EASY PLUG logo buffer to small	ST 45	
ST 31	EASY PLUG logo number error	ST 46	
ST 32	EASY PLUG postbarcode not OK	ST 47	
ST 33	EASY PLUG range command #PA to #IM wrong	ST 48	
ST 34	COLOR PANEL color code not found	ST 49	
ST 35	COLOR PANEL logo does not fit to the card	ST 50	no read of scanner
ST 36	COLOR PANEL color card not found or programmable	ST 51	scanner not programmable (system will be locked)
ST 37		ST 52	stacker full (standard)
ST 38		ST 53	
ST 39	EASY PLUG speedo error	ST 54	
ST 40	receive error RS 232	ST 55	
ST 41	receive error RS 232	ST 56	
ST 42		ST 57	
ST 43		ST 58	
ST 44	ID matrix barcode error	ST 59	acess denied for setting printer to zero

ST 60	memory allocation error (system will be locked)	ST 75	
ST 61	font allocation error (system will be locked)	ST 76	
ST 62	update or numberfield overflow	ST 77	
ST 63		ST 78	
ST 64		ST 79	
ST 65		ST 80	EASY CARD wrong name of file in #FO command
ST 66		ST 81	EASY CARD field number not found
ST 67		ST 82	EASY CARD syntax of #YT or #YB command wrong
ST 68	wrong board installed for selected peripherie option	ST 83	EASY CARD number of data field to big
ST 69	interrupt error (system stands)	ST 84	EASY CARD quantity of variable characters = 0
ST 70	TDI stepper does not respond	ST 85	EASY CARD no card found
ST 71	headstrobe checksum wrong (system will be locked)	ST 86	DATA BASE not enough space for index file
ST 72	speedo system error	ST 87	DATA BASE no possibility to build index file
ST 73	speedo scaling wrong	ST 88	DATA BASE no possibility to sort index file
ST 74		ST 89	DATA BASE barcode onformation nor found in

ST 90	database contains identical records
ST 91	barcode not readable
ST 92	
ST 93	
ST 94	
ST 95	
ST 96	EASY CARD undefined error
ST 97	EASY PLUG undefined error
ST 98	INTERFACE undefined error
ST 99	SYSTEM undefined derror

just warning – self confirming

must be confirmed by the user

POFF	Power OFF – printer is switched OFF
FAIL	Image card could not be formatted
SCAN	Scanner was unable to decode the information
OPEN	cover open – switch is open
LOCK	the printer is locked
DATA	data receive mode
STOP	printer in STOP mode
SNGL	printer in single start mode
WAIT	printer in wait condition
HOST	printer stopped by host
INIT	printer is initialised
DOWN	TDI table goes up
UP	TDI table goes down
.LDR	printer in loader mode
.EMU	printer in emulation mode
.SYS	printer in system mode
SORT	data base information is sorted
----	printer was switched on to early after power down
LOAD	barcodes loaded from card

Maintenance, cleaning and service

Maintenance and cleaning

Clean as a standard printer – sometimes the sensor should be cleaned from paper dust.

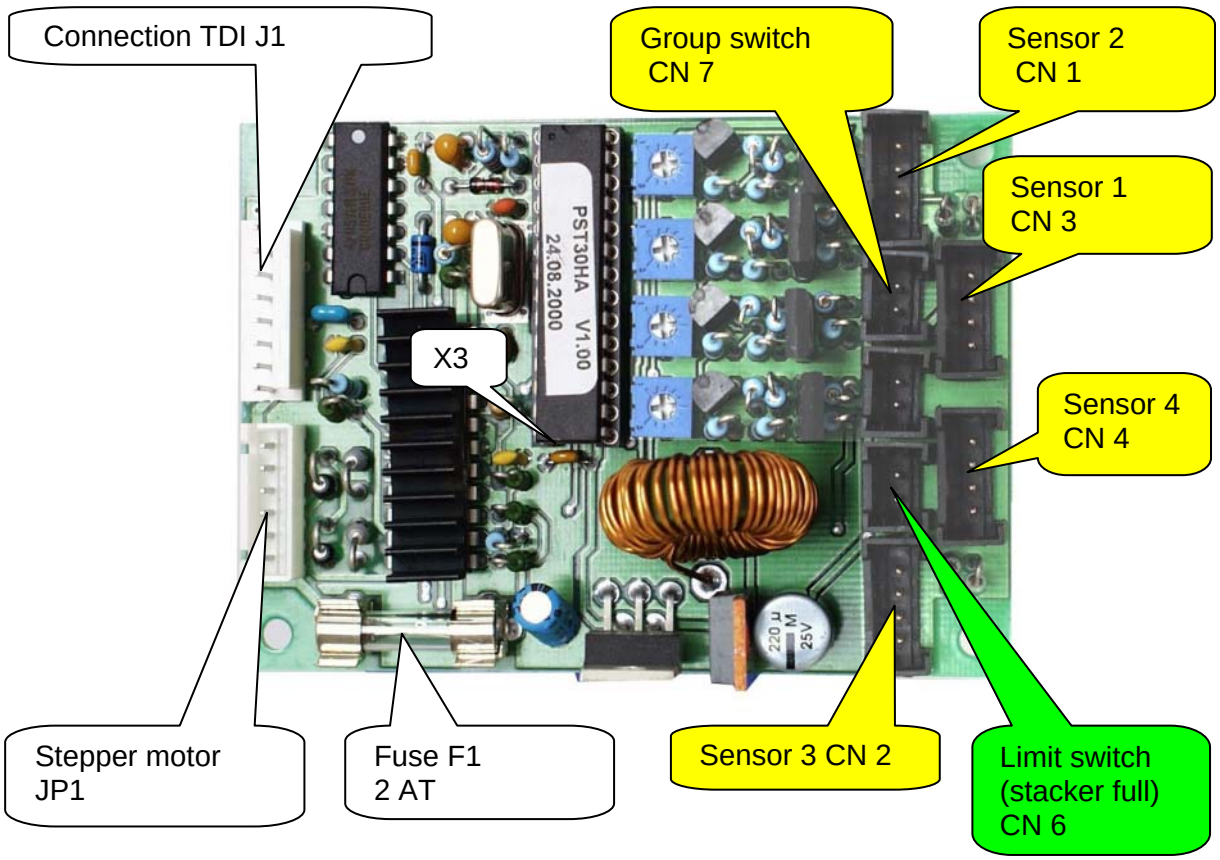
Service

Service parts of the power stacker are – CPU board, micro switch, reflex sensor and maybe the stepper motor.

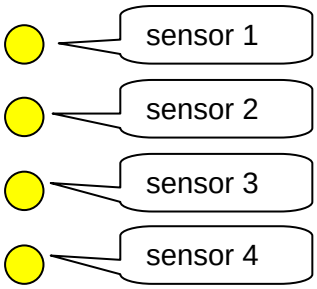
CPU board

The used board in the power stacker is an intelligent board – holding a CPU with the necessary program. The power stacker is working on it's on.

Below you will find a picture of the CPU board showing the connector placing.

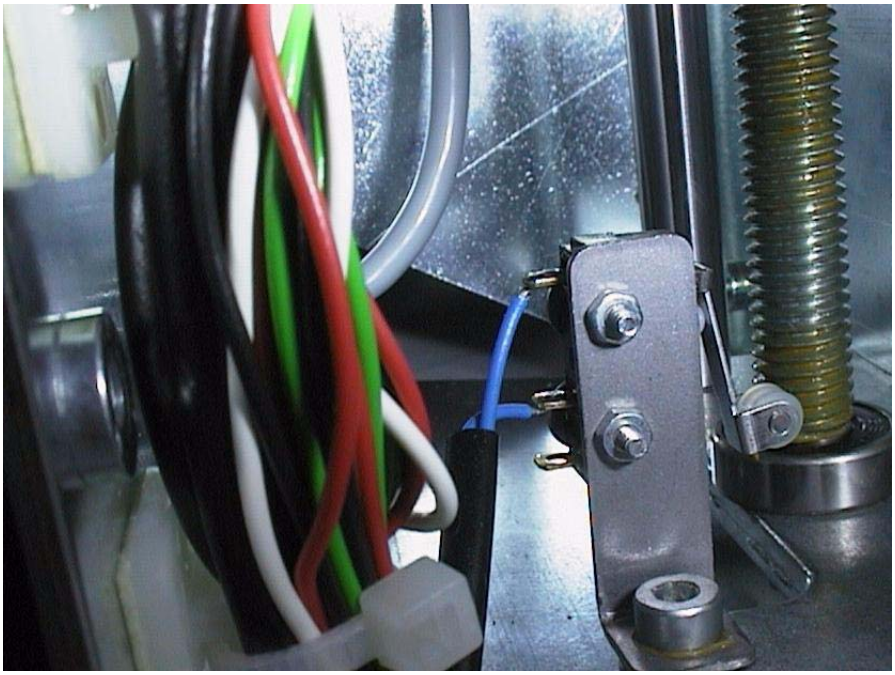


The sensor pairs placed in the front plate are numbered as following



Micro switch

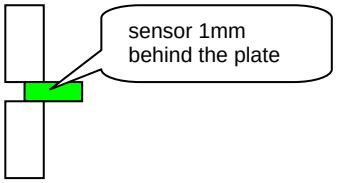
The micro switch (lower end position) can be removed after the cover of the power stacker is removed and the wire is removed from the CPU board.



Reflex Sensor

The sensor pairs are glued into the front plate (with Loctite ....) and a special part. If one of the sensor is defect it has to be removed carefully, the hole has the be cleaned and the new sensor glued in.

Attention: The sensor has to stay 1 mm behind the front plate.

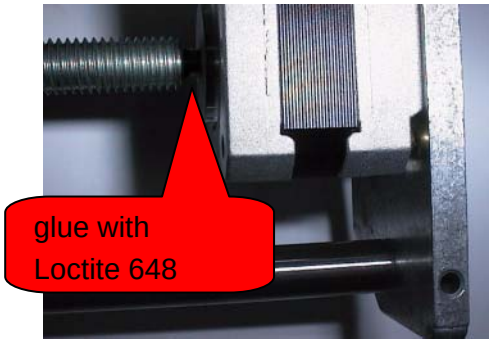


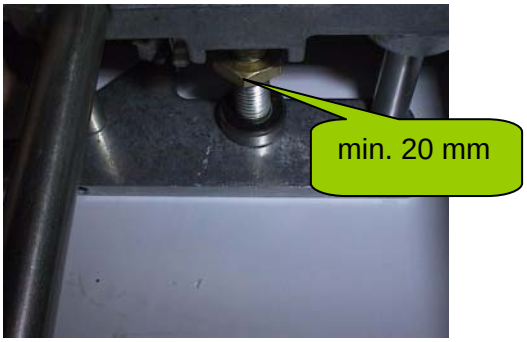
Stepper motor

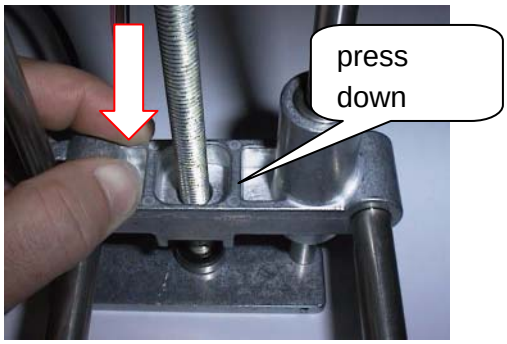
The stepper motor – if mounted to the power stacker – is an assembly and can not be removed separately (motor and threading axle).

Assembly is like described in the TDI manual (platform).

- remove rear cover
- remove board and carrier
- disassemble platform mechanic
- open lower plate
- remove nut from thread axle
- remove platform block
- open motor screw (2) and remove motor together with axle
- clean new motor and axle with Aceton
- glue motor and axle together with Loctite 648 – and assemble immediate
- position hexagonal nut around 20 mm from the end of the axle
- move mechanic in vertical position and press the threading axle down
- the glue is ready after 30 minutes – but the mechanic can be assembled immediate

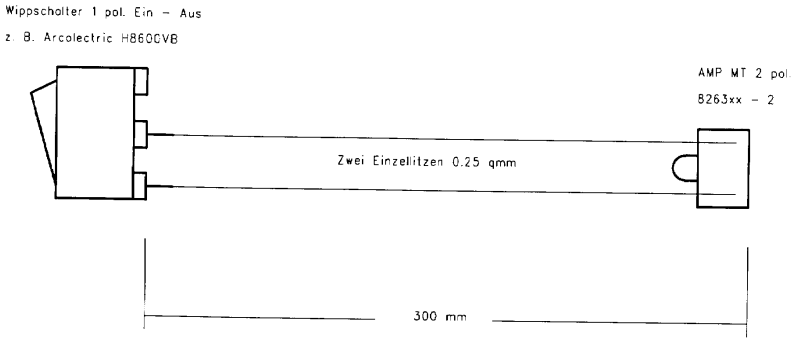






Diagrams

Cable drawings



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TDI Stapler

Schalter mit Kabel

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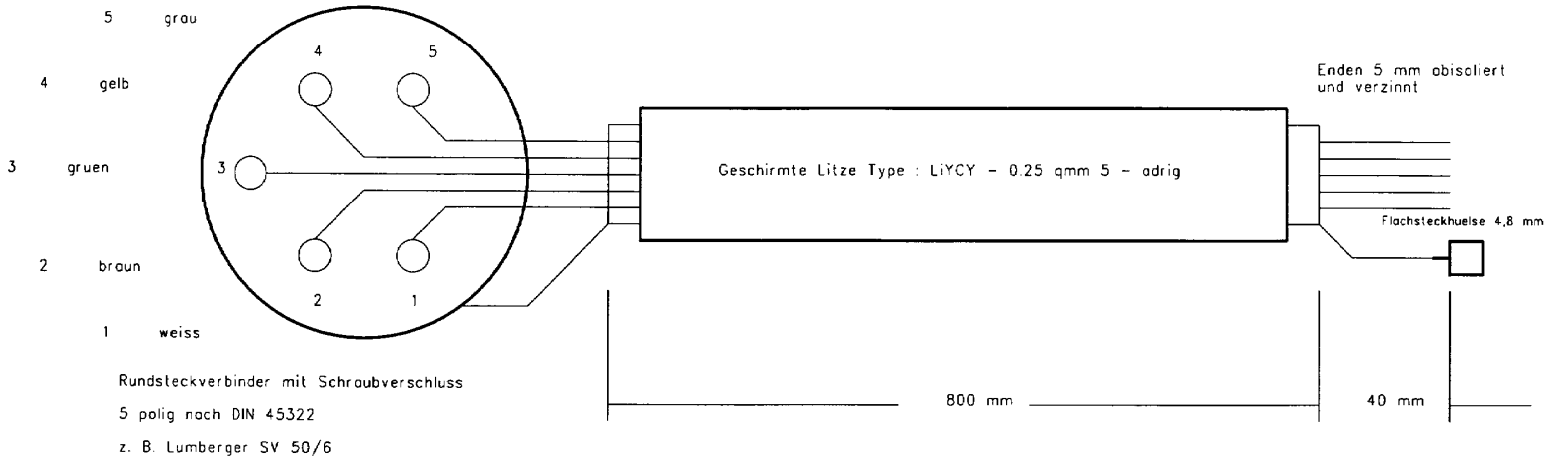
E126

99294–00–6–4



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TDI Stapler

Anschlusskabel

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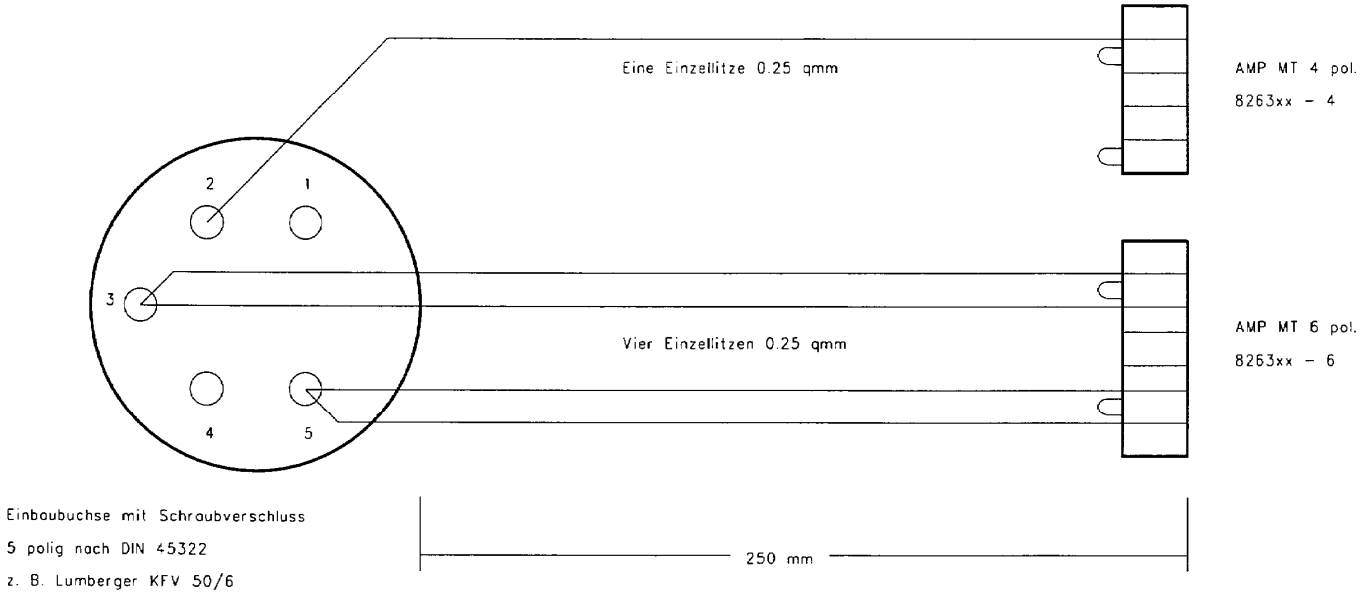

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Anschlusskabel

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E126

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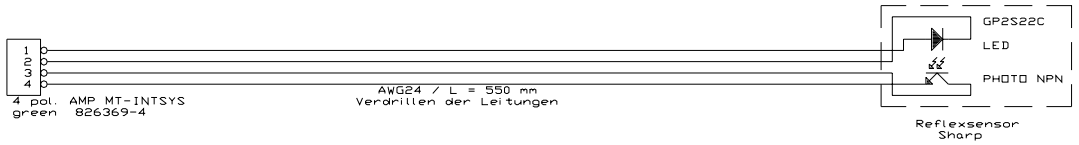

No	Beschr.	Approv.	Date

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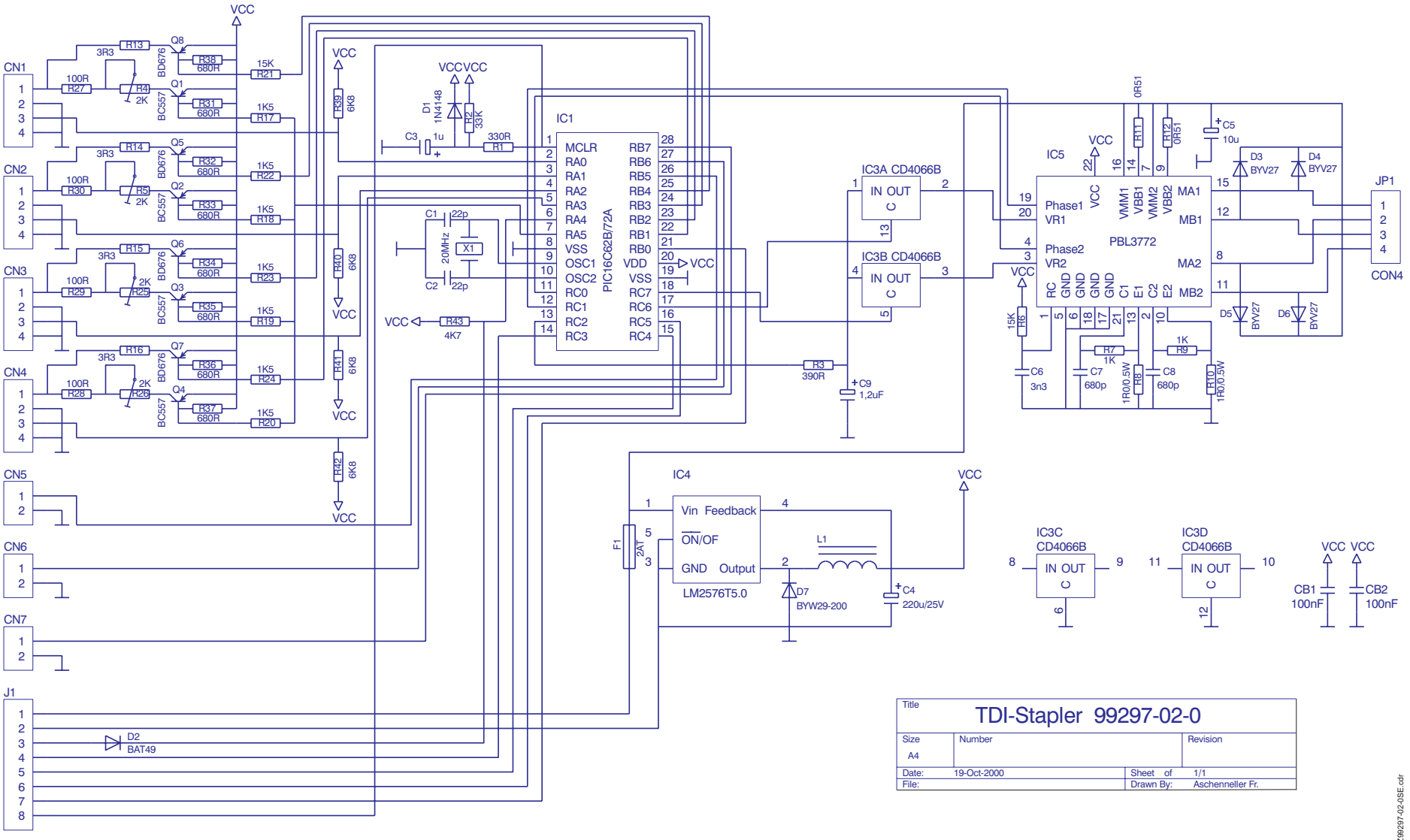
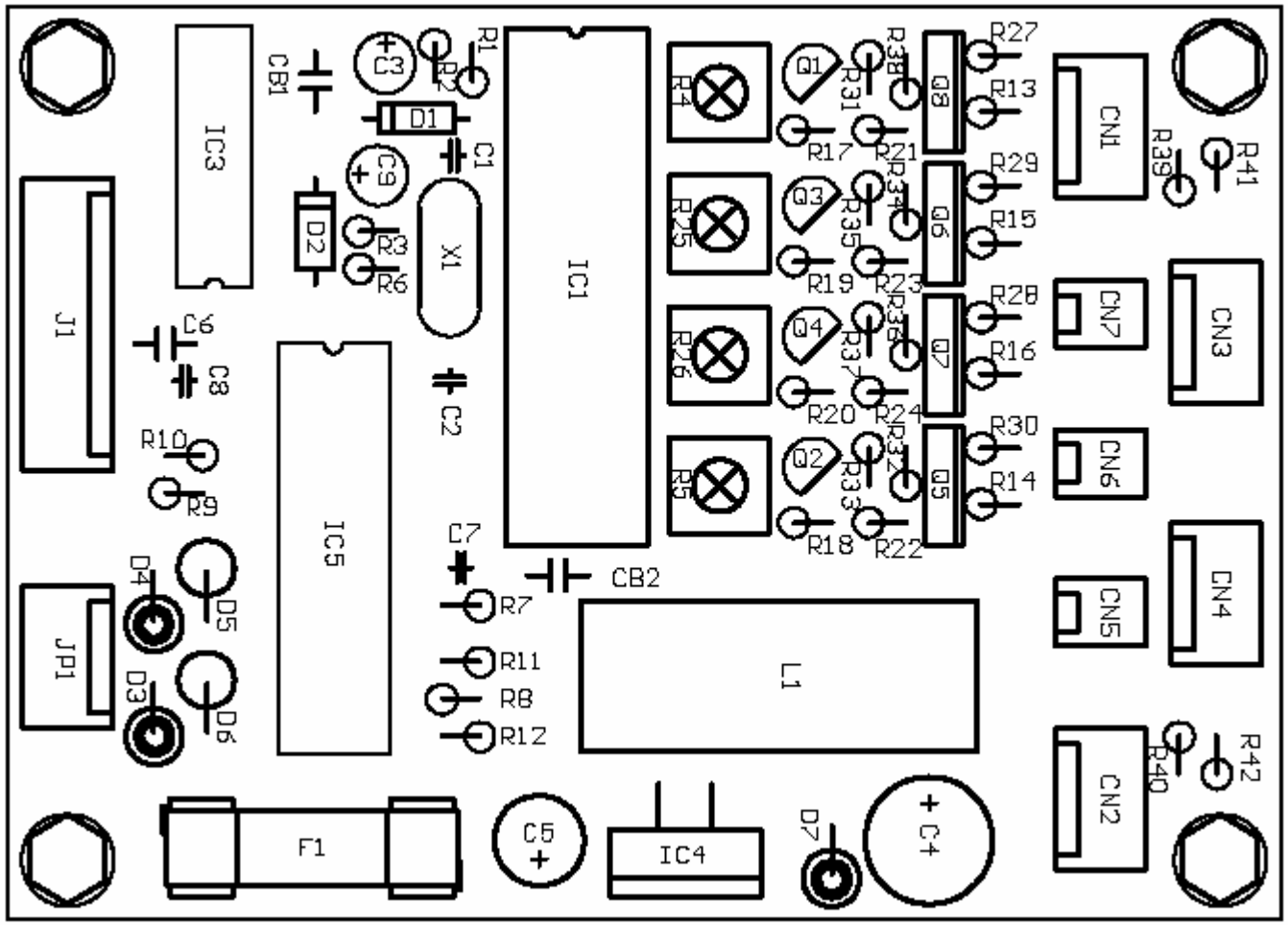
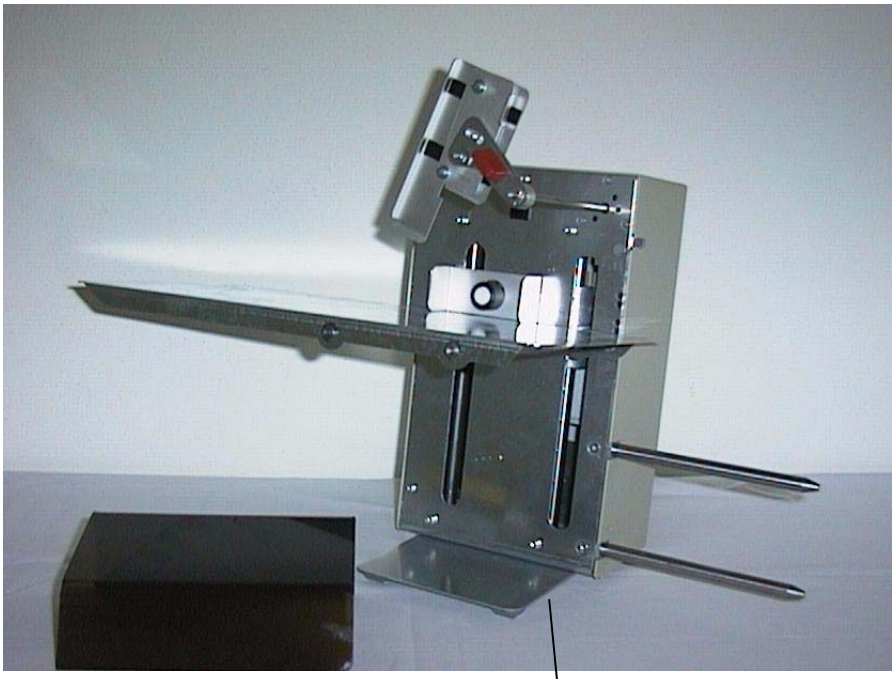
Circuit diagram CPU board



Component diagram CPU board



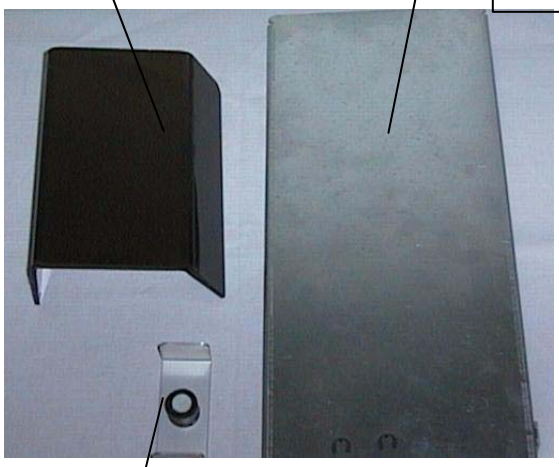
Spare parts list



Part Number : 99300-xx-0
C0066 (Jumbo Stacker)
C0826 (Power Stacker TDI 1050)
Bezeichnung : Power Stacker komplett
Identification : power stacker

Part Number : 99678-xx-0
Bezeichnung : ZSB Abdeckung
Identification : cover assy.

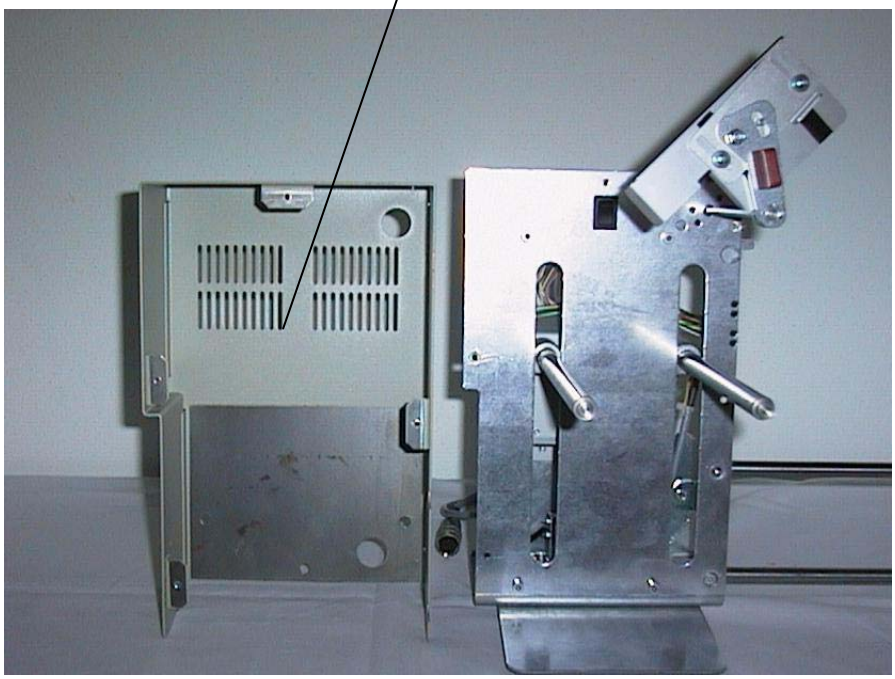
Part Number : 99723-xx-0
C0829 (TDI 1050)
Bezeichnung : ZSB Plattform
Identification : platform assy.



Part Number : 99296-xx-0
Bezeichnung : Anschlag
Identification : stopper

Part Number : 99722-xx-0
C0831 (TDI 1050)
Bezeichnung : Abstreifer 2
Identification : seperator 2

Part Number : 99299-xx-0 C0070 (Jumbo Stacker)
Bezeichnung : Rückhaube
Identification : rear cover



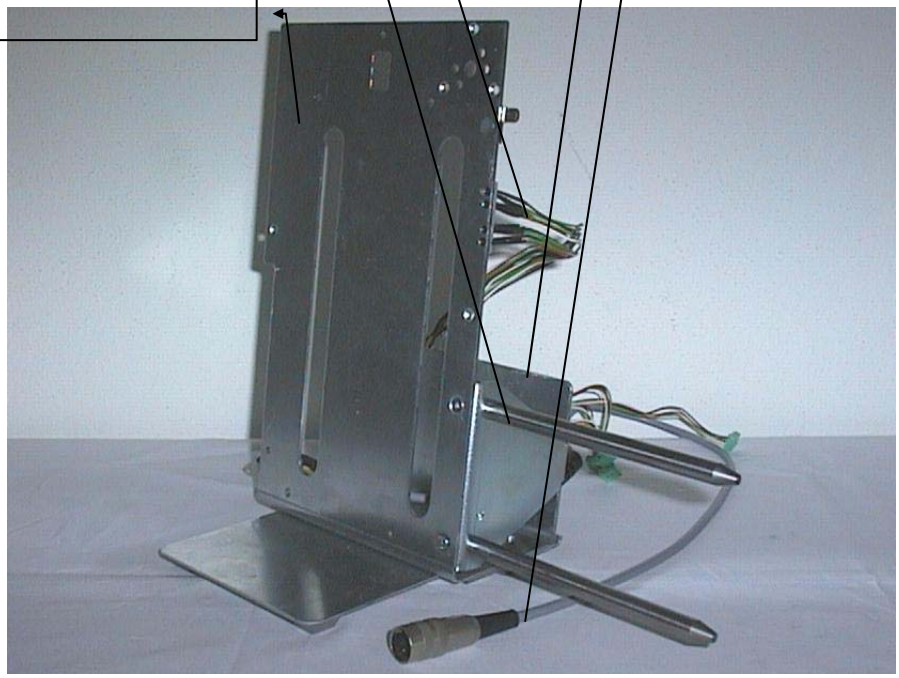
Part Number : 98211-xx-0
Bezeichnung : Reflex Sensor
Identification : reflex sensor

Part Number :99291 -xx-0
Bezeichnung : Achse
Identification : axle

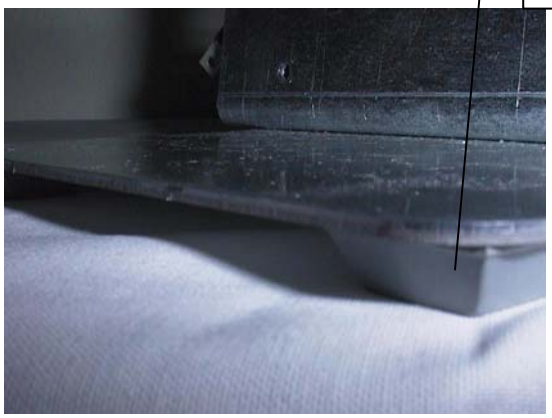
Part Number : 99302-xx-0 C0081 (Jumbo Stacker)
Bezeichnung : ZSB Boden- und Frontplatte
Identification : front- and bottemplate assy.

Part Number : 99303-xx-0
Bezeichnung : Anschluß
Identification : connecting part

Part Number : A2128
Bezeichnung : Rundkabel
Identification : Round cable



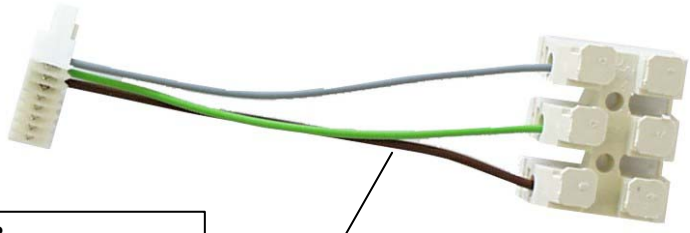
Part Number : 92395-00-3
Bezeichnung : Gehäusefuß
Identification : rubber feet



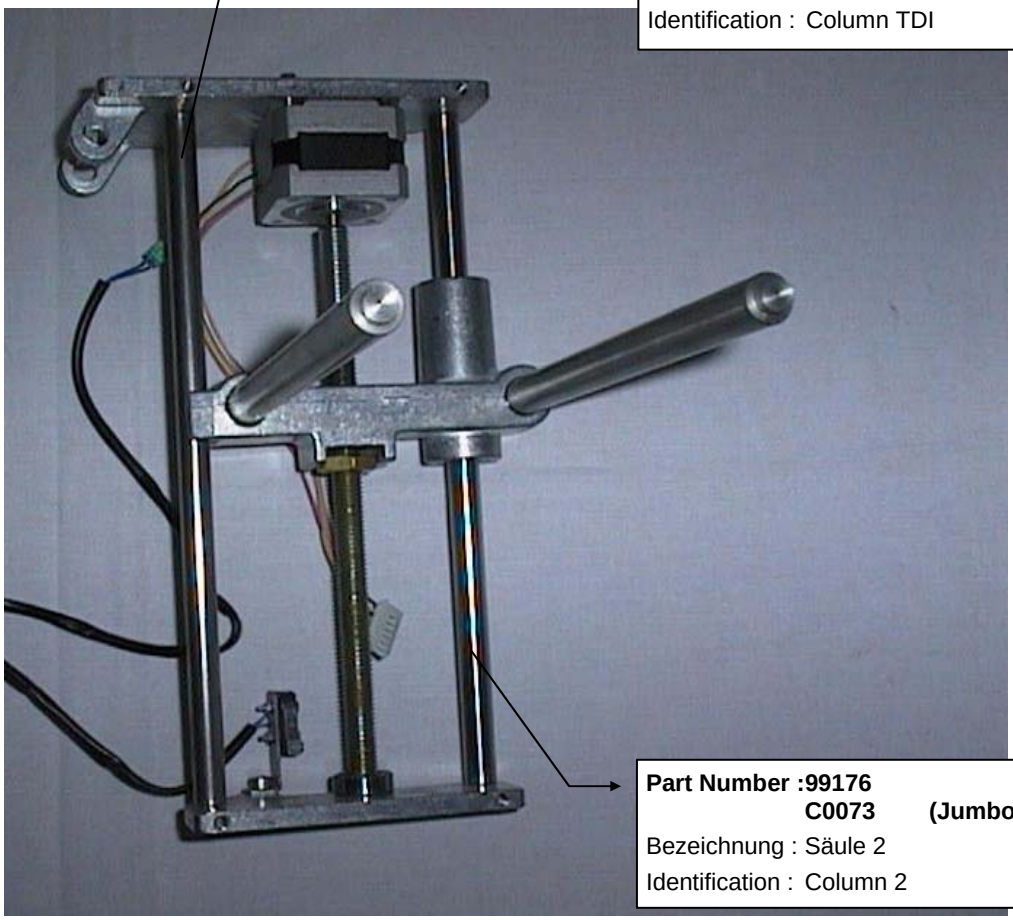
Part Number : 99295
Designation: Steel plate

Part Number : 99297
Designation : CPU board

Part Number : A2299
Designation : Upgrade-Kit Power Stacker
(A2299 = A2273 + 99297)



Part Number : A2273
Designation : Round cable
(Adapter cable for connecting the new board to an old Power Stacker)



Part Number :98280
C0072 (Jumbo Stacker)
Bezeichnung : Säule TDI
Identification : Column TDI

Part Number :99176
C0073 (Jumbo Stacker)
Bezeichnung : Säule 2
Identification : Column 2

Part Number : 98296-xx-0
Bezeichnung : Platte oben
Identification : upper plate

Part Number : 98280-xx-0
Bezeichnung : Säule
Identification : guding axle

Part Number : M 3 x 3,5
Bezeichnung : Innensechskant Schraube
Identification : hexagonal screw

Part Number : A1701-xx
Bezeichnung : Motor mit Spindel für Power-Stacker ZSB
Identification : Motor with spindle for power stacker ass.

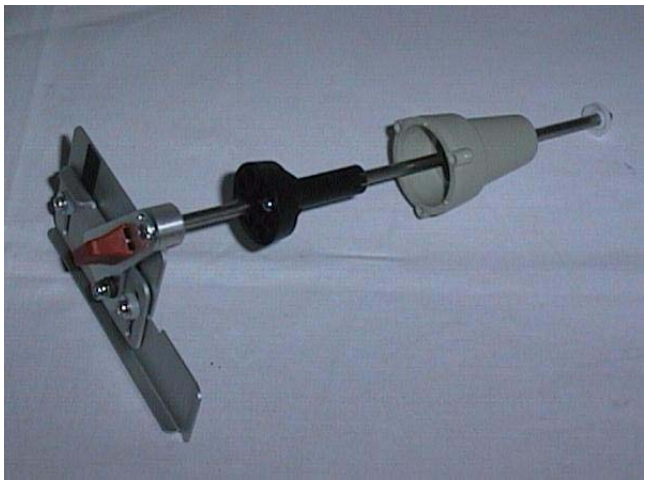
Part Number : 98279-xx-0
Bezeichnung : Mutter
Identification : nut

Part Number : 98725-xx-0
Bezeichnung : Kugellager
Identification : gear

Part Number : 98954-xx-0
Bezeichnung : Platte unten
Identification : lower plate

Part Number : 94763-00-3
Bezeichnung : Microschalter
Identification : micro switch

Part Number : 98293-xx-0
Bezeichnung : Schalterblech
Identification : switch mounting part

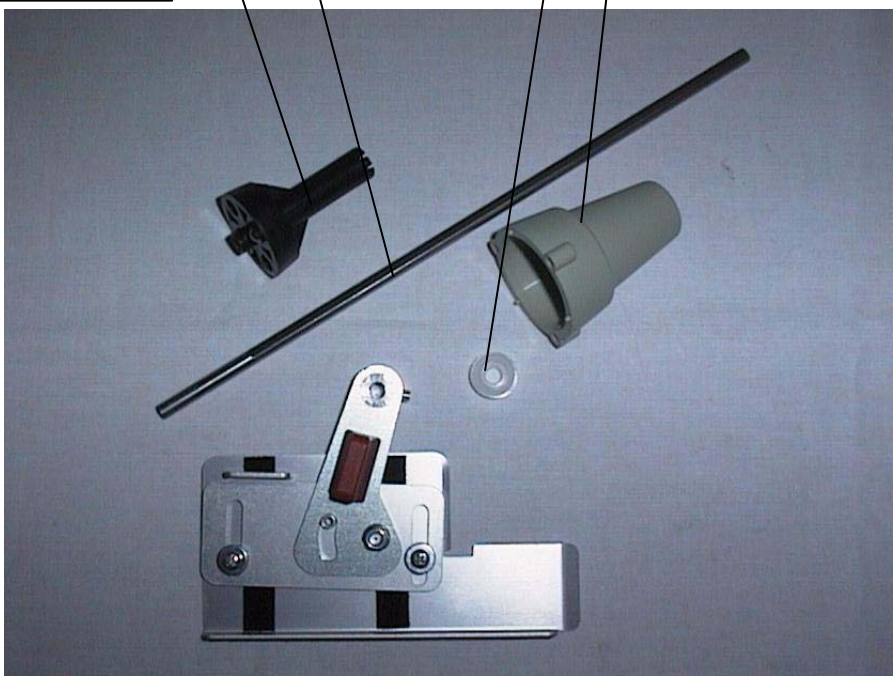


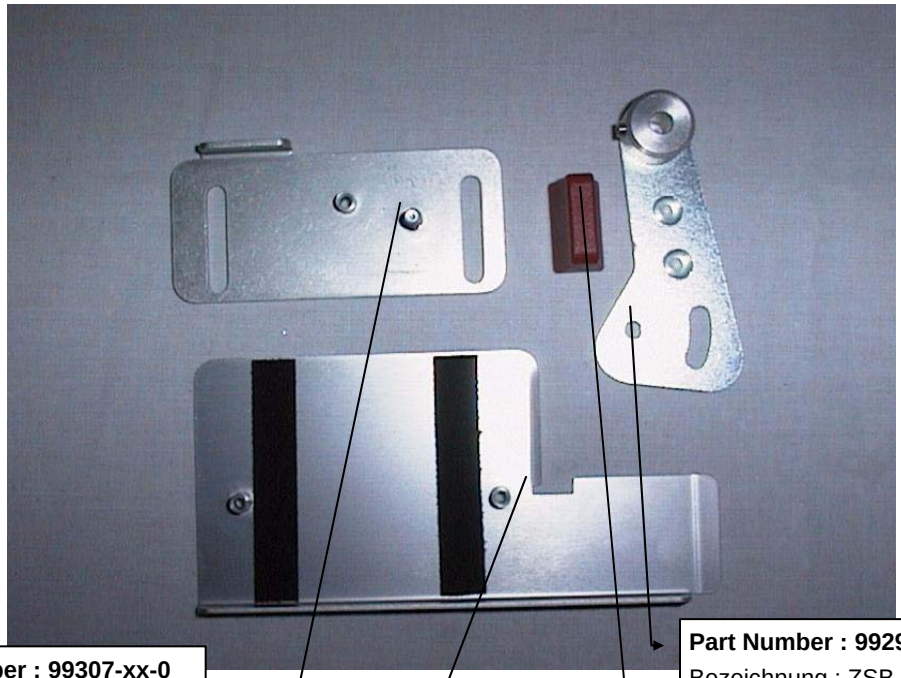
Part Number : 99293-xx-0
C0827 (Power Stacker TDI 1050)
Bezeichnung : Achse 2
Identification : axle 2

Part Number : 98247-xx-0
Bezeichnung : ZSB Nabe
Identification : hub assy.

Part Number : 98579-xx-0
Bezeichnung : Schnellbefestiger
Identification : security part

Part Number : 98240-xx-0
Bezeichnung : Gehäuse
Identification : cover



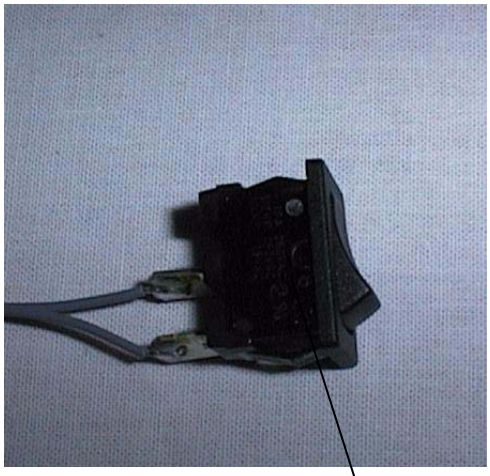


Part Number : 99307-xx-0
Bezeichnung : Führung
Identification : guiding

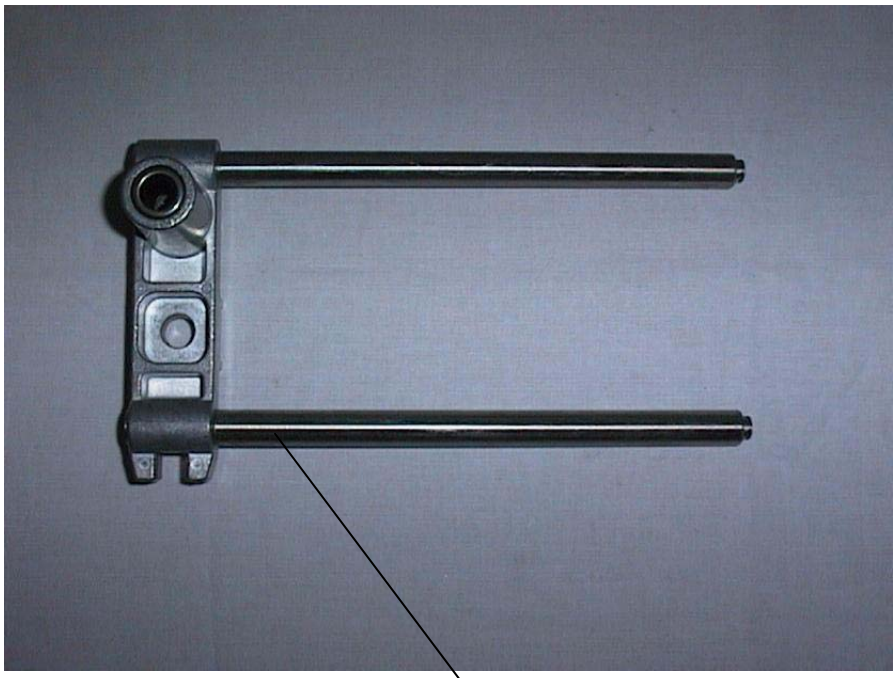
Part Number : 99388-xx-0
Bezeichnung : ZSB Distanzblech
Identification : distanz part assy.

Part Number : 99292-xx-0
Bezeichnung : ZSB Nabe
Identification : lever assy.

Part Number : 98846-xx-0
Bezeichnung : Griff
Identification : handle



Part Number : 99294-xx-0
Bezeichnung : Schalter mit Kabel
Identification : switch with wire



Part Number : 98361-xx-0
C0484 (Power Stacker TDI 1050)
Bezeichnung : ZSB Schlitten
Identification : moving part assy.

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